GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

STARRED QUESTION NO:81
ANSWERED ON:28.11.2005
SOIL EROSION
Purandeswari Smt. Daggubati;Sippiparai Shri A. Ravichandran

Will the Minister of AGRICULTURE be pleased to state:

(a) whether the erosion of the soil is taking place at an alarming rate;

(b) if so, the details thereof and the reasons therefor;

(c) whether the high rate of soil erosion is adversely affecting the farm productivity;

(d) if so, whether any study/research has been conducted by the Government in this regard;

(e) if so, the details thereof; and

(f) the steps taken/proposed to be taken to check erosion of soil?

Answer

MINISTER OF AGRICULTURE (SHRI SHARAD PAWAR)

(a) to (f): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (f) OF LOK SABHA STARRED QUESTION NO. 81 DUE FOR REPLY ON 28TH NOVEMBER, 2005.

(a) to (f): Yes, Sir. The soil formation and erosion is a natural process occurring simultaneously to maintain the equilibrium in eco-system. Due to over exploitation, unscientific use of natural resources and other reasons, the land denudation is more than natural formation. As per available estimate, the average rate of soil erosion in the country is 16.4 tonnes per hectare per year and over 5.3 billion tonnes of soil is lost every year through water erosion, resulting in a loss of around 8 million tonnes of plant nutrients annually. As per recent study conducted by National Bureau of Soil Survey and Land Use Planning (NBSS&LUP), out of total geographical area of 328.60 million ha., about 146.82 million ha. area (45%) is suffering from various kinds of land degradation as per break up given below:-

S.No.	Type of Land Degradation	Extent of Area in million ha.
1	Water erosion	93.68
2	Wind erosion	9.48
3	Water logging	14.30
4	Salinity/alkalinity	5.95
5	Soil acidity	16.03
6	Complex problem	7.38
	Total Degraded area	146.82

In some typical case studies conducted by the Central Soil and Water Conservation Research and Training Institute, Dehradun it has been noticed that there is reduction in the yields of crops and income to the farmers due to loss of top soils. With a view to sustain farm productivity, Government of India has formulated comprehensive schemes/programmes on watershed development for control of soil erosion and land degradation in the country. The various Watershed Development Programmes being implemented are

(i) National Watershed Development Project for Rainfed Areas (NWDPRA),

(ii) Soil Conservation for Enhancing Productivity of Degraded Lands in the Catchments of River Valley Project & Flood Prone River (RVP & FPR),

(iii) Watershed Development Project in Shifting Cultivation Areas (WDPSCA),

(iv) Reclamation of Alkali Soil (RAS),

(v) Externally Aided Projects (EAPs) for development of degraded lands,

(vi) Drought Prone Area Programme (DPAP),

(vii) Desert Development Programme (DDP),

(viii) Integrated Wasteland Development Programme (IWDP) and

(ix) National Afforestation & Eco − Development Project (NAEP). Under these programmes, since inception upto March 2005, an area of 28.533 million ha. has been developed with expenditure of Rs.14577.32 crore as per scheme − wise detail annexed.

The Working Group on Watershed Development, Rainfed Farming and Natural Resources Management for Tenth Five Year Plan, constituted by Planning Commission has suggested a perspective plan for development of 88.5 million ha. in 20 years through Watershed Development Programmes. Accordingly, an area of 21.4 million ha. has been proposed for treatment under various Watershed Development Programmes with an estimated cost of Rs.6422.95 crore during X Five Year Plan.

ANNEXURE

Degraded Lands Developed under various Watershed Development Programmes, since inception upto March, 2005

(Area in Lakh ha. and Expenditure in Rs. Crore)

S.No.	Ministry/ Scheme and year of start	Area treated and Expenditure upto IX Plan		Area treated and Expenditure in first 3 years of X Plan (2002-05)		Total area treated and Expenditure since inception upto March, 2005	
		Area	Expdr.	Area	Expdr.	Area	Expdr
(A) Ministry of Agriculture, Department of Agriculture & Cooperation							
1	NWDPRA (1990-91)	69.79	1877.74	9.55	519.82	79.34	2397.56
2	RVP & FPR (1962 & 81)	54.88	1516.26	5.99	377.91	60.87	1894.17
3	WDPSCA (1974-75)	2.58	166.27	0.60	60.16	3.18	226.43
4	RAS (1985-86)	5.81	76.39	0.78	20.25	6.59	96.64
5	EAPs	15.00	2071.01	8.63	2685.25	23.63	4756.26
	Sub Total	148.06	5707.67	25.55	3663.39	173.61	9371.06
(B) Ministry of Rural Development							
1	DPAP (1973-74)	13.79	897.67	12.50	844.39	26.29	1742.06
2	DDP (1977-78)	6.70	686.02	8.00	614.99	14.70	1301.01
3	IWDP (1988-89)	37.36	461.26	24.60	848.94	61.96	1310.20
	Sub Total	57.85	2044.45	45.10	2308.92	102.95	4353.37
(C) Ministry of Environment & Forests							
1	NAEP (1989-90)	4.76	383.82	4.01	469.07	8.77	852.89
	TOTAL (A+B+C)	210.67	8135.94	74.66	6441.38	285.33	14577.32

Details of abbreviations:
NWDPRA - National Watershed Development Project for Rainfed Areas
RVP & FPR - River Valley Project & Flood Prone River
WDPSCA - Watershed Development Project for Shifting Cultivation Areas
RAS - Reclamation of Alkali Soil
EAP - Externally Aided Projects
DPAP - Drought Prone Area Programme
IWDP - Integrated Wasteland Development Project
NAEP - National Afforestation and Eco − Development Projects